To: Hellmann-Blumberg, Uta@Waterboards[Uta.Hellmann-Blumberg@waterboards.ca.gov]

From: Wilson, Patrick

Sent: Tue 4/1/2014 8:43:54 PM

Subject: FW: Ontario Ministry of the Environment – Perspective on TCE

MAIL RECEIVED: Tue 4/1/2014 8:43:00 PM

More to follow Uta -

From: Kapuscinski, Rich

Sent: Wednesday, October 30, 2013 10:28 AM **To:** OSWER OSRTI Human Health Risk Assessors

Cc: Lee, Alana; Devoney, Danielle

Subject: Ontario Ministry of the Environment – Perspective on TCE

On October 10, the Ontario Ministry of the Environment (MOE) issued a position paper entitled *Perspective on Developing and Recommending Human Toxicity Benchmarks and Risk Management Support.* The MOE endorsed use of EPA/ORD/NCEA's RfC for TCE. The MOE's statement about TCE and the IRIS assessment is excerpted below:

"For TCE, the MOE recently reviewed and selected the US EPA (2011) non-cancer RfC of 2 μg/m3 (jointly based on developmental toxicity and immunotoxicity) as well as the 10-6 cancer risk specific concentration of 0.25 μg/m3 based on the inhalation unit risk. The MOE is aware that there is ongoing discussion regarding the use of a developmental toxicity endpoint, specifically, the risk of heart malformations during early fetal development as a result of maternal TCE exposure. However, we feel that this endpoint as a central basis of the RfC has merit given the multiple lines of supporting evidence. It should be mentioned that the volume of data supporting this endpoint exceeds that of many other RfCs, further lending support to its use. There is additional confidence in the RfC owing to the use of PBPK and BMD modeling of the data sets, which is considered to impart a lowered degree of uncertainty and a decreased reliance on default assumptions."

The MOE also made some suggestions for improved risk communication (including developing (and providing affected communities with) quantitative interpretations of risk (i.e., probability statements about adverse non-cancer health effects) at concentrations above the RfC) and contains some comments about the Alliance for Risk Assessment's recent proposal about noncancer risk characterization. The entire position paper can be

found online at: http://www.allianceforrisk.org/Projects/contaminatedsites/Slandsraped-	DB_TCE	Perspective	to	ARA.pdf
I hope that you will find this information useful.				

Rich Kapuscinski